

Is Your Innovation Strategy Ready to Meet the 21st Century?

BY TAMARA BEKEFI AND MARC J. EPSTEIN

We are living in the midst of great change. The impacts of climate change, social issues, and technology are altering the way we live and work. Water scarcity, greater competition for basic inputs resulting from shifting weather patterns, and a growing population will impact business in far-reaching ways. E-commerce, telecommuting, and new technologies with positive environmental and social impacts are creating new business models and beating the competition.

Companies must future-proof themselves for the 21st century by fundamentally rethinking the definition of sustainability and its role in the corporation. This is no longer a fringe issue. It is core to business and will spell success for companies that craft innovation strategies catalysed by sustainability. Those that choose to ignore it are doomed to failure in the years to come.

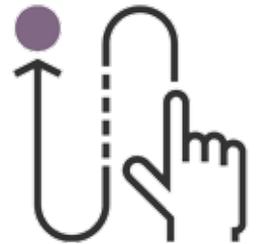
3M, the American conglomerate best known for Post-It notes and Scotch tape, is positioning sustainability at the core of strategy. Known as a model for managing innovation and eco-efficiency – the company has slashed its toxic releases by 99% and greenhouse gas emissions by 72% – 3M

is now actively imagining what the world will look like in 2050 and embedding sustainability in its innovation. The world's most highly reflectivity mirror film that, paired with a regular fluorescent bulb, illuminates building interiors from sunlight is among its latest products. 3M Glass Bubbles, very small but tough glass microspheres with hollow insides to make polymers, are making cars and aircrafts lighter and significantly more fuel-efficient.

Tremendous opportunity is available to companies that create value for both business and society by redefining sustainability, refocusing innovation, and bringing the two together to propel corporate strategy into the 21st century. Those that ignore it do so at their peril.

Our World is Changing, Will Your Company Survive?

Our population is growing – with 7.6 billion people on earth today our numbers are rapidly expanding. We consume natural resources faster than they can be replenished, and the emissions mainly responsible for climate change keep increasing. World energy consumption is estimated to rise dramatically in the next three decades and we continue to be plagued by social and governance issues like child labour, global



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To help foster creative innovation within the company, 3M held a sustainability power pitch that challenged employees to pitch their best idea for a sustainable product to a panel of judges and fellow employees. The employee with the winning idea nabbed a research grant to bring the product to life.

Photo courtesy: 3M



terrorism, bribery and corruption, and global health issues. All of these are impacting business. Competition for water, lower yield crops, and higher basic materials costs are not just social and environmental issues. They are core business issues that will be central to strategy, growth, innovation, and profitability.

Companies have tried to address these issues through sustainability practices targeting the ways business impacts social and environmental issues. They concentrate on minimising their impact by becoming better and more efficient at doing what the company has always done and then reporting on it. Current corporate efforts are focused on risk management, reporting, and/or operational efficiency. While these are very important, they are insufficient to cope with the challenges of the coming decade.

20th Century Sustainability Practice

Risk management-focused sustainability is often led by the legal or regulatory group and concentrates on the legal and regulatory measures companies take to avoid exposures and fines resulting from social, political, and environmental issues. It also includes activities undertaken to meet legal and regulatory expectations.

Usually led by communications professionals, *reporting-focused sustainability* emphasises communications products, public relations, and stakeholder management.

Efforts to use resources more effectively through *operational efficiency* usually result in both

increased efficiency and cost savings for companies. Using data to better understand energy and water use, materials management, and worker behaviour has improved companies' abilities to run the business, produce goods, and supply customers while reducing costs.

The Innovation Paradox

While having accomplished many noble goals, 20th century sustainability practices are crowding out the possibility of sustainability-focused breakthrough innovation and with it, the opportunity for increased profitability and benefits to society. This is because 20th century sustainability practices are suffering from the *innovation paradox*. The innovation paradox happens when the aggressive pursuit of operational excellence and incremental innovation crowds out the possibility of creating what we really want – breakthrough innovation. Today's narrow focus on the incremental improvement of a company's footprint and cumbersome reporting practices are distracting talented employees from seeing the bigger picture. Without a broader view, achieving breakthrough innovation is impossible. Yet breakthrough, sustainability-focused innovation is what will save companies in the 21st century.

The current approach to corporate strategy – imagining that the forces shaping today's markets will be comparable going forward – will not work for the future we are moving towards. Assuming that a company's past strengths will carry on into the future without making sustainability central to strategy is

very risky. With major changes looming on the horizon, it is no longer about saving 5% or 10% more cost. It is now about staying in business.

What Now?

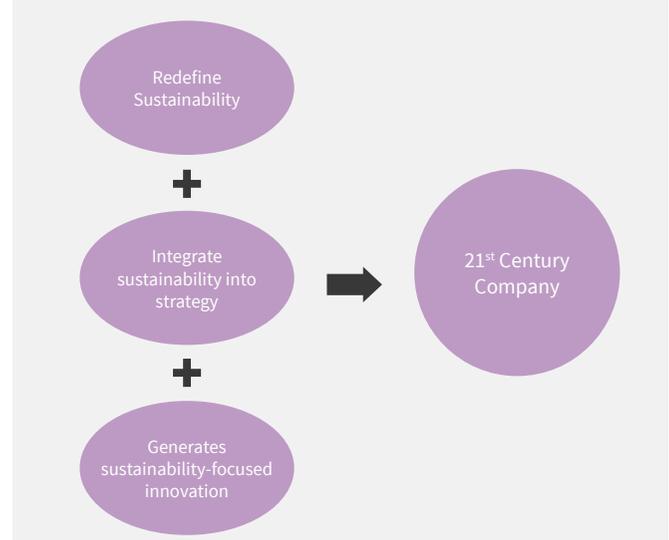
So what is the solution? Corporate leaders must integrate a sustainability lens into innovation by thinking more broadly about how the world is changing and how one's company can get killed. iPhones fundamentally changed the way we capture memories and Kodak never saw it coming. One result of digital photography is the dramatic decrease in photo-printing chemical use, and with it their negative impacts on the environment. Likewise, Amazon forever changed the way we shop but very few companies were paying attention. By reducing a consumer's need to drive around from store to store Amazon is affecting how we live, our environmental impact, and upending everything in the producer-consumer relationship.

It is conceivable that in the near future going shopping will mean going to a showroom only to try on items that are purchased online or 3-D printed in a local warehouse. Delivery will likely be by drone. This will eliminate the need for stores to stock shelves in multiple locations, will reduce overproduction, and will change the footprint of every store in the mall. Beyond the companies that produce and sell things, delivery companies, real estate, and urban planning will be impacted. And while this may sound like a science fiction movie, it isn't so far off. Companies like the hipster eyeglass purveyor Warby Parker and millennial menswear retailer Bonobos are already testing the showroom concept, while Amazon has been working on a drone delivery system since 2013.

Business models are changing and sustainability is at the core. Companies ought to be thinking about much broader changes in society and social and environmental issues and putting those at the core of innovation strategy. Nissan, the Japanese automaker, is doing that by convening a Future Lab to understand how transportation is changing. This group is trying to anticipate what transportation needs will look like in a future with global megacities, smart technologies, and the sharing economy. Nissan's Future Lab looks decades ahead, beyond products, to examine the future of mobility in a wider sense and identifies potential issues and opportunities for the business. One result is the Scoot

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EXHIBIT 1. The 21st Century Company



Quad, a 100% electric, two-seater compact vehicle with a top speed of 25 mph designed for city driving. Prototypes are being tested in San Francisco in partnership with Scoot Networks, allowing drivers to rent Scoot Quads on an hourly basis for use around town.

The first step to ensuring a company's survival in the 21st century is to fundamentally rethink the definition of sustainability and its role in the company. The next steps are to integrate sustainability into strategy and generate 21st century sustainability-focused innovation. The result will be the 21st century company.

This new, 21st century company model is illustrated in Exhibit 1 (see Exhibit 1 above).

Sustainability – Redefined

A 21st century re-definition of sustainability is absolutely critical to saving companies and saving the world. And they are inextricably linked. Expanding sustainability from its current focus on a company's footprint should include:

- How companies impact environmental and social issues,
- The impacts of social and environmental issues on business, and
- The effect of new technologies and business models that are reaping sustainability results for business and society and killing companies that can no longer compete.

A few companies are already benefiting from this new thinking. Tesla has upended the car industry, completely changing what happens under the hood and winning the market – the Tesla Model S, a zero emissions vehicle, is *Consumer Reports'* most highly rated car ever tested. GE

has generated more than \$200 billion in revenue from its Ecomagination innovation products, while Philips' LED light bulb is its lighting division's core technology.

Putting sustainability in its rightful place, at the core of the company where it becomes the basis for sustainability-focused breakthrough innovation, is critical for the 21st century company.

Integrating Sustainability into Strategy

To produce sustainability-focused breakthrough innovation, companies need to incorporate sustainability into strategy. This will happen when sustainability practices move from the current focus on risk management, reporting, and operational efficiency to include:

- Sustainability-focused products and services,
- Measurement and accountability, and
- Increased profitability.

Sustainability-focused products and services:

Companies that have included sustainability in product and services design, production, use, and end-of-life will thrive in the 21st century. Instead of producing greener or more socially conscious versions of already-existing products in increasingly efficient ways, winning companies will view sustainability more broadly and include it in innovation strategy. Many leading companies understand that ignoring sustainability will be the death knell of their business so are integrating it into innovation to win the market now and future-proof their businesses.

Tetra-Pak, the Swedish multinational food packaging and processing company, examined its supply chain and realised it has to source from renewable materials to survive. In 2015 the company unveiled TetraRex Bio-based package, the world's first fully renewable liquid food carton package produced from nothing but renewable, recyclable, and traceable packaging and bio-based plastic derived from sugarcane. Unilever, the Anglo-Dutch multinational consumer goods company, has also been generating revenue from sustainability-focused innovation. Its Sustainable Living Brand – products that have measurable positive sustainability impacts that includes Unilever's five biggest global brands – grew 30% faster than the rest of the business and delivered half of the company's growth in 2015.

Measurement and internal, external accountability:

Almost all large companies publish corporate sustainability reports. Most are externally focused and not used much for internal business decision-making. This has to change. 21st century sustainability measurement and accountability will expand beyond today's practice so it is useful for internal decision-making and a variety of stakeholders, including investors. Financial professionals will have an important role to play because of the needed emphasis on metrics for capital

investment, project budgeting, and investors who are increasingly seeking data for corporate valuations.

Increased profitability: Companies will expand their focus from cost minimisation through operational efficiency to revenue generation from sustainability-focused breakthrough innovation. Companies like Nike are seizing this opportunity. Its FlyKnit technology uses one thread instead of multiple pieces of material to create shoe uppers and has transformed sneaker manufacturing, making Nike's net income soar by 40%.

Generating Sustainability-focused Innovation: But How?

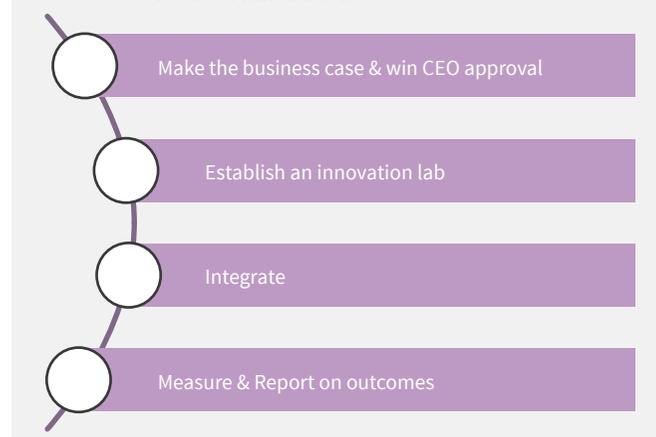
Devising ways to minimise both their company's and their consumers' footprint while maximising their handprint (the positive environmental and social impact we each can have) requires leadership and some changes to current corporate practices.

A four-step path, illustrated in Exhibit 2 (see Exhibit 2 below), will lead companies' sustainability-focused innovation and long-term value creation, saving both companies and society.

Make the business case: Making the business case to gain CEO support for sustainability-driven innovation is critical. Convening personnel from across corporate divisions, creating the latitude for experimentation, and funding research and prototypes requires leadership. It is helpful to provide detailed and business-specific analysis of issues likely to impact the business – like shifting environmental and social conditions, demographic changes, and new technologies. So is the financial executives' input on connecting sustainability-driven innovation to medium and long-term growth and profitability.

Establish an innovation lab: Create a “company-within-the-company” with a different management and budget model than traditional business units to achieve

EXHIBIT 2. Four Steps to 21st Century Sustainability-focused Innovation





sustainability-focused 21st century breakthrough innovation. This group is tasked with understanding company-related sustainability issues – the way our future will look, the way people will live, move, and work in the next century – and asked to envision innovative products and services that will create new markets or upset existing ones. This hybrid team should consist of sustainability, strategy, innovation, accounting and finance, R&D, operations, legal/regulatory, packaging, materials management, and supply chain. By putting sustainability issues at the core, being given creative latitude, resources, and an extended timeline this group can be the inventors of products and technologies leading to business breakthroughs and societal well-being.

Integrate: Integrating new ideas and transforming them to fit existing business models is critical, but doing it can be challenging. Some companies may let the innovation evolve into a separate division, while others may allow innovation to take over an existing division. Yet others may embed mini innovation labs into existing business units and alter corporate approaches to sustainability and innovation altogether, like Nike's Considered Design Unit. Considered Design is a think tank, tool box, internal consultancy, competitive catalyst, and an antenna to the outside world tasked with providing inspiration, education, and the tools to drive sustainability best practices deep into Nike's product creation units and processes. Regardless of the method, integrating breakthrough innovations is not dissimilar to integrating a new acquisition, which is firmly in the wheelhouse of established companies.

Measure & Report: Measuring and reporting metrics for sustainability-focused innovation products and services must be developed with an emphasis on their usefulness for internal business

decision-making, external investor evaluation, and other stakeholders' assessment. Financial executives have an important role to play.

To survive and thrive in a future filled with social and environmental changes and technologies that are reshaping almost everything in our daily lives, companies have to re-define sustainability and re-position it at the core of corporate strategy. The result will be breakthrough sustainability-focused innovation and game-changing products and services. Our changing world means business cannot continue as usual – companies that do not adapt, innovate, and transform themselves using sustainability as a springboard will die. Is your corporate strategy ready to meet the 21st century? **EBR**



About the Authors



Tamara Bekefi is the principal of Daedalus Strategic Advising, a sustainability-focused consulting firm that helps companies achieve competitive advantage through strategic innovation, risk management, and reporting. Author of numerous papers, articles, and white papers, Tamara has lectured at leading corporate forums and universities. She was formerly a Research Fellow at Harvard's Center for Business & Government.



Marc J. Epstein has held positions as Distinguished Research Professor of Management at Jones Graduate School of Business at Rice University and professor at Stanford Business School, Harvard Business School, and INSEAD. He has written or co-written nearly twenty books and more than two hundred papers, and has worked extensively with leading global companies on innovation and sustainability.

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